



AVIATION MAINTENANCE SAFETY CONFERENCE

2005

HAZARDOUS MATERIAL CONTROL & MANAGEMENT PROGRAM

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AVIATION MAINTENANCE SAFETY CONFERENCE

TOPICS OF DISCUSSION: 2005

- **WHAT IS HAZMAT? HAZWASTE?**
- **TRAINING REQUIREMENTS**
- **MATERIAL SAFETY DATA SHEETS (MSDS)**
- **AUTHORIZED USERS LIST (AUL) FORMAT**
- **FLAMMABLE STORAGE LOCKER DESIGN
AND STORAGE REQUIREMENTS**
 - **WHAT IS A BUNG?**
 - **FLAMMABLE STORAGE POINT OF
CONTACT**

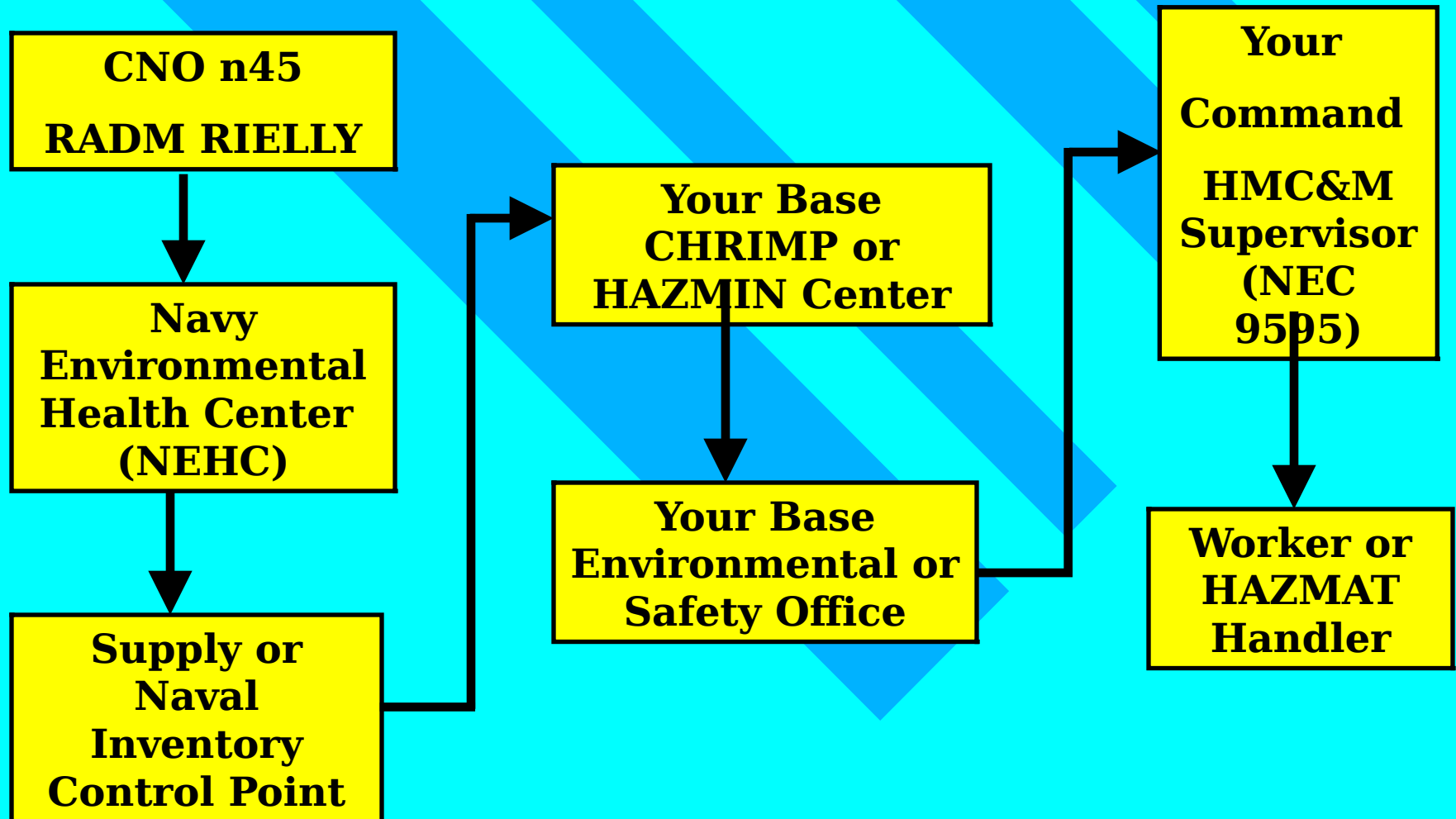


AVIATION MAINTENANCE SAFETY CONFERENCE

TOPICS OF DISCUSSION: 2005

- **LABELING REQUIREMENTS**
- **LOCATION AND PURPOSE OF HAZARD CHARACTERISTIC CODES (HCC)**
- **HAZMAT TRACKING LOG**
- **ALODINE CHANGES AND STORAGE REQUIREMENTS**

HAZARDOUS MATERIALS PROGRAM CHAIN OF COMMAND



**When You Ignore
Safety Hazards....**



**...You Ignore
The Safety Of Others**

HAZMAT REFERENCES

DoDINST 6050.5

OPNAVINST 4110.2

**OPNAVINST 4790.2H, Vol. V,
CH. 20**

**OPNAVINST 5090.1B
(Change 4)**

OPNAVINST 5100.23F, CH. 7

**OPNAVINST 5100.19D, CH.
B3 & C23**

29 CFR 1910.1200

**FEDERAL, REGIONAL &
LOCAL INSTRUCTIONS AND**



WHAT IS A HAZARDOUS MATERIAL?

A Hazardous Material (HM) is... “any material that, because of its quantity, concentration, or physical or chemical characteristics, may pose a substantial hazard to human health or the environment when incorrectly used, purposefully released, or accidentally spilled.”

A Hazardous Waste (HW) is... “any discarded material (liquid, solid or gas) which meets the definition of HM and/or is designated as a hazardous waste by the EPA or a State authority.

(Ref: OPNAVINST 5100.19D, CH. B3, Para. B0301.d.(1) and (2))

Note: Navy ships do not produce Hazardous Waste. All Hazardous Materials, used or unused, that cannot be used for its originally intended purpose shall be returned to the base Consolidated Hazardous Reutilization and Inventory Management Program (CHRIMP) for further disposition.

(CHRIMP MSG 131755Z
JAN 03)

TRAINING REQUIREMENTS

- Personnel are required to have training prior to exposure.
- OPNAVINST 4790.2H, Vol. V, CH. 20, para. 20.3.h.(2) requires all personnel to have documented HAZCOM training within 30 days of assignment.
- Listing of required training courses available at the Navy Occupational Safety Health and Environmental Training Center (NAVOSHENVTRACEN) website
<http://safetycenter.navy.mil/training/catalog.htm>
- HMC&M Supervisors required to be graduates of the following courses:

***Hazardous Material Control and Management Technician course (A-322-2600)**

***Introduction to Hazardous Material (Ashore)**
(A-422-2621)

OPNAVINST 5100.23F, CH. 7, para. 0702.g.(10).(h). Note

TRAINING REQUIREMENTS

- All hands shall receive HAZCOM training initially and annually thereafter.**
- Training should be tailored to individual jobs and specific exposures.**
- Training broken down to Management, Supervisory & Non-**

Category of Activities Personnel	HAZCOM Training
Top Management	Initial
Supervisors and Employee Reps *	Initial and annual refresher plus spill response & emergencies for supervisors
Non-supervisory Personnel *,**	Initial plus OJT and refresher by supervisor, as required
Emergency Response (Supervisors and Workers), HW Spill, Handlers & Cleanup Personnel	See 29 CFR 1910.120 and OPNAVINST 5090.1B

TRAINING REQUIREMENTS

- Check with local/base Safety/Environmental office for a schedule of required NAVOSH training classes including a four (4) hour HAZCOM refresher.**
- Suggest sending personnel through these courses which usually last from 2 to 4 hours to maintain NAVOSH requirements.**
- Utilize Industrial Hygiene Survey reports, MSDS and updated training lectures to provide additional, specific training.**

Material Safety Data Sheets (MSDS)

MSDS - A technical bulletin containing information about the hazardous material

-Copies of current MSDS can be printed from the HMIRS website www.dla.dlis.navy.mil/hmirs

-A copy shall maintained for each HM on hand (hard copy or HMIS/HMIRS)

-Readily accessible to all hands with no physical or administrative barriers

-MSDS binders should be organized to ensure quick retrieval and referencing and shall include the local referencing number as per OPNAVINST 5100.23F, CH. 7

AUTHORIZED USAGE LIST (A.U.L.)

The commanding officer shall develop, implement, manage and revise as necessary an activity level AUL. The AUL shall include the following:

- 1) The stock number and item name for each HM listed or product name and manufacturer name as they appear on the label/MSDS.
- 2) The AUL shall identify processes for each HM listed.
- 3) Provide a means to periodically review the AUL.
- 4) The addition of a uniquely identified numbering system that will allow for the reference, retrieval and cross-reference between the AUL, MSDS, label and inventory.

A.U.L. FORMATTING

- **Most AULs come from your Base Environmental Office with the NSN, MFG name or chemical/product name**.**
- **It is up to you, the HMC&M Supervisor, to reformat/revise that AUL to include the remaining information (processes, unique identifier, work centers) as required by the listed references.**
- **The use of the Microsoft Excel program will aid in this process.**

****NOTE: FOR THOSE COMMANDS THAT DEPLOY ABOARD SHIPS, ENSURE THE SHIP'S SHML CONTAINS ALL CHEMICALS LISTED ON YOUR AUL.**

A.U.L. FORMATTING

PROCESSES: This will describe what the hazardous material is used for.

- One method is to enter the information into a block. That entails typing a lot of information into a small space.
- A much simpler suggestion would be to develop a multi-digit code that identifies a process and enter that code into the block on the AUL. This will save space and keep things simple.

A.U.L. FORMATTING

(continued)

SAMPLE PROCESS CODES:

<u>CODE</u>	<u>PROCESS</u>
<u>DESCRIPTION</u>	

AC02	FLIGHTLINE OPERATIONS	Including, but not limited to, and HW generated from operations such recovery,
HM used in flight line as A/C launch & loading & unloading, servicing, etc.		

THESE CODES ARE PLACED ON THE AUL W/THE PROCESS & DESCRIPTIONS INCLUDED AS COVER PAGE.

CL01	CLEANING, GENERIC component, equipment, cleaning. including. but not limited to	All forms of part, etc.
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A.U.L. FORMATTING

(continued)

UNIQUE IDENTIFIER: This is a numbering system that will quickly identify the material in case of an emergency. The identifier should be kept as simple as possible and be located on the chemical label, MSDS, AUL and inventory sheets. 1, 2, 3 or A, B, C or ANY COMBINATION THEREOF WILL SUFFICE. The MSDS number can be used but trying to identify the correct 5-digit MSDS number normally let alone during an emergency situation is rather difficult. The key is quick identification and retrieval!

A.U.L. FORMATTING

(continued)

WORK CENTER SEGREGATION: Just like it sounds. Two different ways that I have seen them done are,

1. The Master AUL lists all chemicals and all work centers are authorized to use every chemical listed. This is not practical because it allows personnel to come into contact with chemicals they are not familiar with or may use for an unauthorized purpose.
2. A more practical application will be developing a separate AUL for each work center. The HMC&M Supervisor will distribute a copy to each work center and keep a master copy for him/herself. This allows for better control of the chemicals and prevents

FLAMMABLE STORAGE LOCKERS

**CORRECTLY
LABELED**
(NFPA 30, 4-3.5)

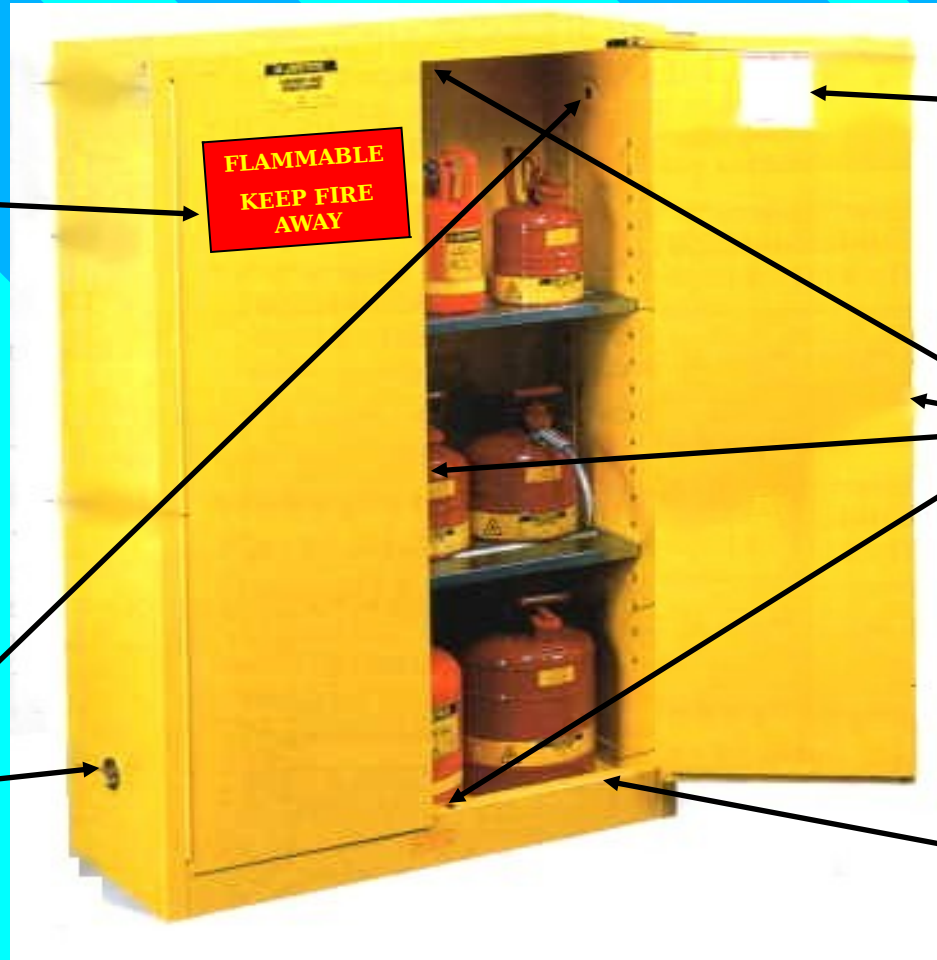
**FLAMMABLE
KEEP FIRE
AWAY**

**INVENTORY
LIST**
(5100.23F, CH.
7)

**BUNGS
INSTALLED
INDOORS****
(NFPA 30, 4-
3.4)

**3-POINT
LOCKING ON
DOORS**
(NFPA 30, 4-3.3.
(b))

**SILL 2"
ABOVE
BOTTOM OF
CABINET**
(NFPA 30, 4-3.3.
(b))



"RULES FOR FLAMMABLE / CORROSIVE STORAGE LOCKERS"

- 1) Ensure effective shelf life processes are in place to remove or replace outdated materials.**
- 2) Ensure an MSDS for each HM contained in the locker is available.**
- 3) Ensure all HM containers are properly labeled, segregated and free of corrosion and leakage.**
- 4) Ensure weekly inspections are conducted and a record of the inspections are maintained.**

5) Ensure that the locker is kept locked at all times.

"RULES FOR FLAMMABLE / CORROSIVE STORAGE LOCKERS"

(continued)

- 5) Ensure lockers do not block a means of egress, are free of weeds, debris or other combustible materials not required for storage.**
- 6) Ensure each HM is uniquely identified for reference, retrieval, and cross-reference between the label, MSDS, AUL and HM locker inventory.**

APPLICABLE REFERENCES : OPNAVINST 5100.19D, CH. B3; OPNAVINST 5100.23F, CH. 7; 4790.2H, Vol. V, CH. 20; 29 CFR 1910.1200; NFPA 30

WHAT IS A BUNG...?



BUNGS

(continued)

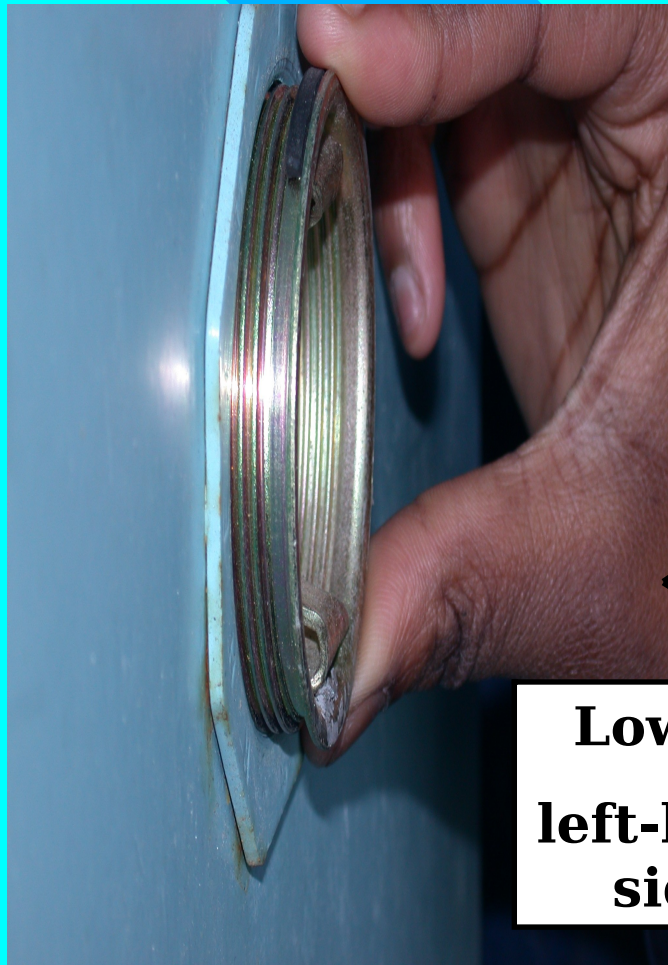
**NFPA 30 FLAMMABLE AND COMBUSTIBLE LIQUIDS
CODE**

4-3.4

“The storage cabinet shall not be required by this code to be vented for fire protection purposes and vent openings shall be sealed with the bungs supplied with the cabinet or with bungs specified by the manufacturer of the cabinet. However, if the storage cabinet is vented for any reason, the cabinet shall be vented directly to outdoors in such a manner that will not compromise the specified performance of the cabinet and in a manner that is acceptable to the authority having jurisdiction.”

What does this mean? Well, it means keep the bungs installed in the lockers!

**Installed in two (2) places on each flammable
or corrosive storage locker.**



**Lower
left-hand
side**



**Upper
right-
hand
side**

POINT OF CONTACT FLAMMABLE STORAGE LOCKERS

NAVSEA APPROVED FLAMMABLE LIQUIDS STORAGE (FLS) CABINETS OR LOCKERS:

Protectoseal Company, 225 W. Foster Ave., Bensenville, IL 60106, 630-595-0800

-Model # 5514S (4 to 6 gal., 19"W x 18"D x 17"H)

-Model #5517S (10 to 15 gal., 19"W x 18"D x 35"H)

Justrite Mfg. Co., 2454 Dempster St., Des Plaines, IL 60016, 708-298-9250

-Model #25040N (4 gal., 17"W x 17"D x 22"H)

-Model # 25710N (12 gal., 23.5"W x 18"D x 35.25"H)

-Model #25315N (15 gal., 23.5"W x 18"D x 44.25"H)

Delta Ind., Inc., 1490 Lindsey Blvd., Idaho Falls, ID 83405, 208-529-8545

-Model #CSL10 (10 gal., 20"W x 20"D x 36"H)

-Model # CSL15 (15 gal., 20"W x 20"D x 46"H)

****Some models may be discontinued suggest contacting MFG for current listings and pricing information.**

For further information please contact:

Rob Vasinda, NSWCCD-SSS Code 9783

LABELING REQUIREMENTS

- **Manufacturer's labels for identification of HM containers must clearly identify:**
 1. **the material name.**
 2. **the manufacturer's name and address.**
 3. **the nature of the hazard presented by the HM including the target organ affected by the material.**
- **Marking unlabeled containers, tanks or containers where the label has been destroyed or damaged, commands may use the DoD Hazardous Chemical Warning Label, DD 2521 or DD 2522. These labels may be printed out along with an MSDS on the HMIS system. www.dlis.dla.mil/hmirs**

APPROVED LABELS

Personnel can print these labels on plain paper or the pre-printed color forms

DD 2521 (4" X 7")

(S/N 0102-LF-012-1100)

HAZARDOUS CHEMICAL WARNING LABEL	
1. PRODUCT IDENTITY: ALODINE 1201	
2. PRODUCT SERIAL #:	3. STOCK #:
BQCTG	8030008238039
4. ITEM NAME: CORROSION RESISTANT COATING, CHEMICALLY TREATED ALUMINUM	
5. SPECIFIC HAZARDS (Including Target Organ Effects): NOT PROVIDED / EYES: CAN CAUSE SEVERE IRRITATION. SKIN: CAN CAUSE IRRITATION. SKIN ABSORPTION: CHROMIC ACID MAY BE ABSORBED THROUGH SKIN, ESPECIALLY IF SKIN IS DAMAGED. FATAL KIDNEY DAMAGE REPORTED IN A PERSON WHO EVIDENTLY ABSORBED CHROMIUM TRIOXIDE INTO THE BODY. INHALATION: WILL IRRITATE, MAY BURN MUCOUS MEMBRANE IF PROLONGED. CHRONIC, PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE CHROME SORES. LONG TERM EXPOSURE CAN CAUSE LIVER DAMAGE, KIDNEY DAMAGE, DERMATITIS. PROLONGED OR REPEATED INHALATION OF MIST MAY CAUSE ULCERATION & PERFORATION OF NASAL SEPTUM.	
6. CONTACT INFORMATION: a. Company Name: HENKEL CORPORATION-EMERY GROUP b. Address (Street, P.O. Box, City, State, Zip Code and Country): 4900 ESTE AVENUE P.O. BOX N/K CINCINNATI, OH 45232-0 US c. Emergency Telephone Number (Including Area Code): 517-263-9430	
7. PROCUREMENT YEAR:	8. CAGE CODE:

DD FORM 2521, APRIL 2002 PREVIOUS EDITION MAY BE USED

LARGE SIZE
FOR 5-GAL
CANS &
LARGER

SMALL SIZE
FOR
GALLON
CANS &
SMALLER

DD 2522 (8.5" x 11")

(S/N 0102-LF-012-1800)

HAZARDOUS CHEMICAL WARNING LABEL	
1. PRODUCT IDENTITY: ALODINE 1201	
2. PRODUCT SERIAL #:	3. STOCK #:
BQCTG	8030008238039
4. ITEM NAME: CORROSION RESISTANT COATING, CHEMICALLY TREATED ALUMINUM	
5. SPECIFIC HAZARDS (Including Target Organ Effects): NOT PROVIDED / EYES: CAN CAUSE SEVERE IRRITATION. SKIN: CAN CAUSE IRRITATION. SKIN ABSORPTION: CHROMIC ACID MAY BE ABSORBED THROUGH SKIN, ESPECIALLY IF SKIN IS DAMAGED. FATAL KIDNEY DAMAGE REPORTED IN A PERSON WHO EVIDENTLY ABSORBED CHROMIUM TRIOXIDE INTO THE BODY. INHALATION: WILL IRRITATE, MAY BURN MUCOUS MEMBRANE IF PROLONGED. CHRONIC, PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE CHROME SORES. LONG TERM EXPOSURE CAN CAUSE LIVER DAMAGE, KIDNEY DAMAGE, DERMATITIS. PROLONGED OR REPEATED INHALATION OF MIST MAY CAUSE ULCERATION & PERFORATION OF NASAL SEPTUM.	
6. CONTACT INFORMATION: a. Company Name: HENKEL CORPORATION-EMERY GROUP b. Address (Street, P.O. Box, City, State, Zip Code and Country): 4900 ESTE AVENUE P.O. BOX N/K CINCINNATI, OH 45232-0 US c. Emergency Telephone Number (Including Area Code): 517-263-9430	
7. PROCUREMENT YEAR:	8. CAGE CODE:

DD FORM 2522, APRIL 2002 PREVIOUS EDITION MAY BE USED

H.C.C.

HAZARD CHARACTERISTIC CODE

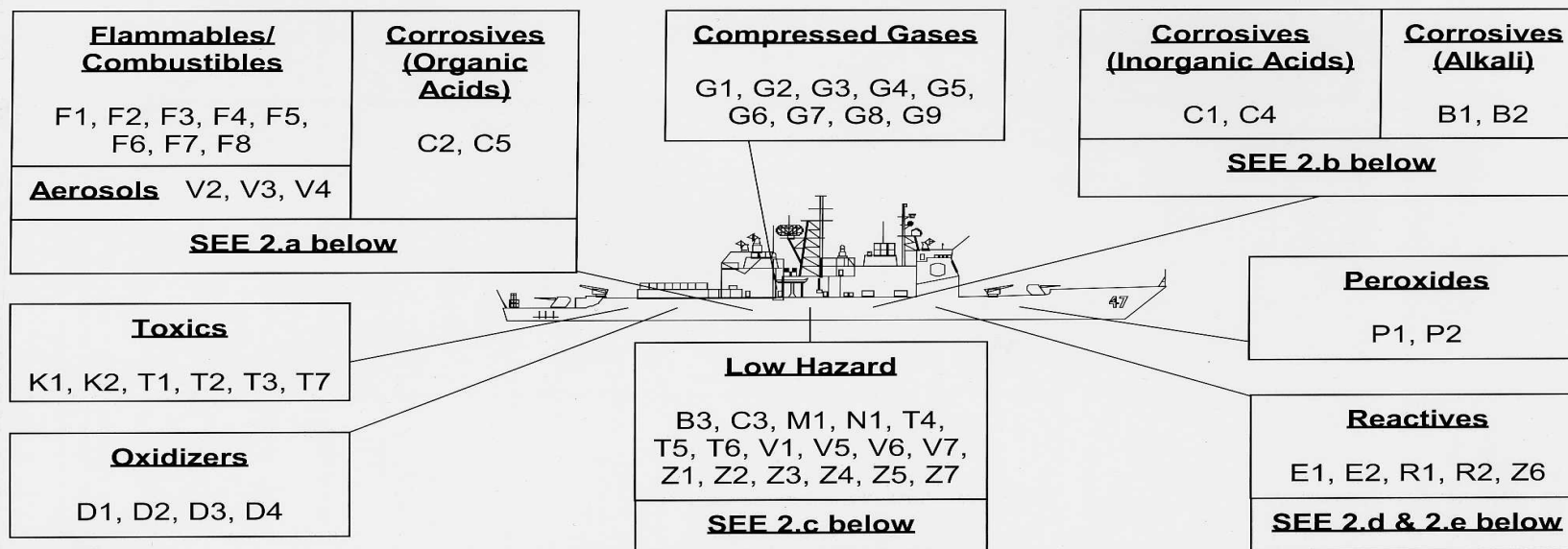
- **The HCC is located on an HMIRS MSDS in the Physical/Chemical Properties section. (usually page 4)**
- **The HCC is a 2-digit, alpha-numeric code used in simplify the storage of Hazardous Substances.**
- **Compatibility Charts located in OPNAVINST 5100.19D, CH. C23, APP. C23-C & C23-F, along with the materials MSDS can be used to assist you in ensuring chemicals in your storage lockers are compatible**



HAZARDOUS MATERIAL COMPATIBILITY STORAGE DIAGRAM



The Hazardous Characteristic Code (HCC) for each material can be found in the Physical/Chemical Characteristics or the Logistics Information section of the Material Safety Data Sheet (MSDS) under the item's NIIN in the Hazardous Material Information System (HMIS) or Hazardous Material Information Resource System (HMIRS).



Instructions:

- Each block represents a separate stowage location. The codes in the boxes are grouped with other codes with which they are compatible for storage. A subdivision within a block represents secondary separation within the primary classification.
- The following secondary stowage requirements apply:
 - Stow organic acids in a locker lined with acid-resistant material in the flammable liquids storeroom separated by a partition, or by at least 3 feet, from all other material. Separate aerosols (V2, V3, V4) from flammables by placing in a locker or barrier such as floor to ceiling wire mesh, chain link fence, etc. to protect personnel from aerosols that can become self-propelled projectiles.
 - Separate B1, B2, C1, and C4 by at least 3 feet from each other.
 - Separate B3 and C3 by at least 3 feet from each other.
 - Further segregate R1 into a Spontaneously Combustible storage within the Reactive Storage area.
 - Should not store R2 in areas protected with water sprinkler system. Fire protection should be non-water based.
- For more detailed information concerning secondary segregation within each group, refer to Defense Logistics Agency (DLA) Instruction 4145.11, Chapter 4, Table 1, or Appendix C, the Storage Segregation Matrix Notes of Table C-1.

•Used for shipboard storage, this diagram can be used ashore for specific chemical storage compatibility.



NAVOSHENVTRACEN COMPATIBILITY CHART



HMUG GROUP	HCC see note 2	GROUP NAME	EXAMPLES	INCOMPATIBLE MATERIALS	EXAMPLES	REACTION IF MIXED
1	C1, C2, C4, C5	ACIDS	Battery Acid Paint Removers De-Rust Spray	FLAMMABLES/ COMBUSTIBLES ALKALIS/BASES/CAUSTICS OXIDIZERS (HMUG Groups 2, 3, 4, 6, 7, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 22)	Degreasers, Carbon Removers, Anti-Fogging Compounds	HEAT Gas Generation VIOLENT REACTION
2	F1 to F7, P1, T3, V3, V4	ADHESIVES	Epoxyes Isocyanates Diethylenetriamine	ACIDS ALKALIS/BASES/CAUSTICS OXIDIZERS (HMUG Groups 1, 3, 18)		HEAT FIRE HAZARD
3	B1, B2	ALKALIES BASES/ CAUSTICS	Ammonia Sodium Hydroxide Cleaners	ACIDS/OXIDIZERS FLAMMABLES/COMBUSTIBLES (HMUG Groups 1, 2, 6, 8, 9, 10, 11, 14, 17, 18, 19, 20, 22)	Battery acid, Paint Removers, De-Rust Sprays, Paints, Solvents	HEAT Gas Generation VIOLENT REACTION
4	C1-C4, B1-B3, F2 to F7, T4, T6, V2-V4	CLEANING COMPOUNDS	Degreasers Carbon Removers Anti-fogging Compounds	DETERGENTS/SOAPS OXIDIZERS (HMUG Groups 1, 7, 18)	Calcium Hypochlorite, Sodium Nitrite, Hydrogen Peroxide	HEAT FIRE HAZARD
5	G1 to G9	COMPRESSED GASES	Acetylene, Propane, Nitrogen, Argon, Helium, Oxygen	HEAT SOURCES Consult paragraph C23 for specific handling and storage guidance (HMUG Groups 8, 9, 10, 11, 12, 15, 18, 19)		FIRE HAZARD EXPLOSION HAZARD
6	F2 to F5, T6, V2, V3, V4	CORROSION PREVENTIVE COMPOUNDS	Corrosion Inhibitors Chemical Conversion Compounds	ACIDS/BASES OXIDIZERS IGNITION SOURCES (HMUG Group 1, 3, 18, 20)		FIRE HAZARD
7	B3	DETERGENTS/ SOAPS	Trisodium Phosphate Scouring Powders Disinfectants	ACID-CONTAINING COMPOUNDS (HMUG Groups 1, 4, 18)	Battery Acid, Paint Removers De-Rust Sprays	VIOLENT REACTION HEAT
8	F8, V6, V7	GREASES	Lithium Grease Silicone Molybdenum	OXIDIZERS ALKALIS/BASES/CAUSTICS (HMUG Groups 3, 5, 18)		FIRE HAZARD HEAT
9	T6, V4, V6, V7	HYDRAULIC FLUIDS	Petroleum-Based Synthetic Fire-Resistant	CORROSIVES, OXIDIZERS (HMUG Groups 1, 3, 5, 18)		VIOLENT REACTION
10	F2 to F4, T4, T6, V2-V6	INSPECTION PENETRANTS	Petroleum-Based Dyes	CORROSIVES, OXIDIZERS (HMUG Groups 1, 3, 5, 18)	Battery Acid Caustic Soda Chlorine laundry bleach Calcium Hypochlorite Hydrogen Peroxide OBA Canisters Paint Removers	EXPLOSION HAZARD
11	F4, T6, V2, V3, V4, V6	LUBRICANTS/ OILS	General Purpose, Gear, Turbine, Weapons	ACIDS HEAVY METALS (HMUG Groups 1, 18, 20)		HEAT FIRE HAZARD
12	F2 to F6, P1, T3, T4, T6, V1-V4	PAINT MATERIALS	Primers, Enamels, Urethanes, Lacquers, Varnishes, Non-Skid, Thinners	ACIDS OXIDIZERS (HMUG Groups 1, 5, 18)		HEAT FIRE HAZARD
13	C1-C4, B1-B3, D1	PHOTO CHEMICALS	Developers, Stopbath, Toners, Bleaches, Replenishers	CORROSIVES OXIDIZERS (HMUG Groups 1, 3, 18)		HEAT, FIRE HAZARD VIOLENT REACTION
14	F4	POLISH/WAX COMPOUNDS	Buffing Compounds Metal Polishes General Purpose Waxes	CORROSIVES OXIDIZERS BATTERIES (HMUG Groups 1, 5, 18, 21, 22)	Battery Acid Calcium Hypochlorite Sodium Nitrite Sodium Hydroxide	HEAT FIRE HAZARD
15	F2 to F6, T3, T4, T6, V1-V4	SOLVENTS	Methyl Ethyl Ketone (MEK) Toluene, Xylene Acetone	MATERIAL IS NOT REACTIVE KEEP DRY		NO REACTION
16	T6, T7, Z1	THERMAL INSULATION	Asbestos Fiberglass Glass Wool	CORROSIVES OXIDIZERS HEAVY METALS (HMUG Groups 1, 3, 18, 20, 21)		HEAT VIOLENT REACTION
17	C1-C4, B1-B3, D1	WATER TEST/ TREATMENT CHEMICALS	Nitric Acid Mercuric Nitrate Caustic Soda	PETROLEUM BASED MATERIALS FUELS, SOLVENTS, CORROSIVES, HEAT (HMUG Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 19, 20, 21, 22)		FIRE HAZARD VIOLENT REACTION EXPLOSION HAZARD TOXIC GAS GENERATION
18	D1 to D4	OXIDIZERS	Calcium Hypochlorite Laundry Bleach OBA Canisters	CORROSIVES OXIDIZERS (HMUG Groups 1, 3, 5, 18)	Battery Acid Calcium Hypochlorite Sodium Nitrite Sodium Hydroxide	FIRE HAZARD TOXIC GAS GENERATION
19	F1 to F4, V4, V5, V6	FUELS	JP4, JP5 Gasoline Diesel Fuel	CORROSIVES OXIDIZERS WATER TREATMENT/PHOTO CHEMICALS (HMUG Groups 1, 3, 6, 13, 17, 18, 21)	Xylene Toluene Alcohol	HEAT VIOLENT REACTION TOXIC GAS GENERATION
20	T6, V7, Z2	HEAVY METALS	Mercury Lead Beryllium	SOLVENTS HEAVY METALS OXIDIZERS (HMUG Groups 15, 17, 18, 20)		TOXIC GAS GENERATION
21	Z4 to Z7	BATTERIES	Lead-Acid Dry-Cell Alkaline	CORROSIVES OXIDIZERS (HMUG Groups 1, 3, 5, 18)		TOXIC GAS GENERATION
22	T2 to T6	PESTICIDES	Insecticides, Fungicides Rodenticides Fumigants			

1. This chart is to be used as a **GUIDE ONLY!**
2. Compare the desired HMUG Group/HCC in the left column with the Incompatible Material(s) of that Group in the center column on the same row. Mixing of the HMUG Group/HCC with the Incompatible Material(s) may result in the reaction(s) listed in the right column.
3. Not all applicable HCCs are listed; only the most frequently encountered HCCs (except N1) are listed.

VISIT US AT: www.norva.navy.mil/navosh

REV 09-03

•Used ashore
for chemical
storage
compatibility.

•This diagram
does not list all
Hazard
Characteristic
codes.

•Good general
use diagram.

HAZMAT TRACKING LOG

DOES YOUR HAZMAT LOG LOOK LIKE THIS?

HAZMAT LOG BOOK					
DATE	T/O	T/I	USED	AMOUNT RETAINED	DI
021903	0942	1010	Q	1 CAN	
021903	1000				
021903	1000	1130	a little bit	mostly all of it	
021903	1320	1340	a little bit	1 KIT	
021903	1335	1340	a little bit	1 CAN	
030201	0744	ESG	a little bit	1 CAN	
030502	0800	0900	Some	1 CAN	
030502	0815	09100	Not Much	1 CAN	
030502	0930	1000	ALittle	1 CAN	
030503	1011	1			
030504	0815				
031505	0840				
032403	1000	11017	102	1 CAN	

A LITTLE
BIT

SOM
E

NOT MUCH

HAZMAT TRACKING LOG

- Keep the HAZMAT tracking logbook neat and orderly.
- All materials are required to be tracked as to quantities checked out for use, returned for reuse and disposed of as waste. (OPNAVINST 4790.2H, VOL. V, CH. 20, para. 20.3.d.(17))
- Suggest ordering materials in bulk to save money. Suggest ordering materials that measures ounces to accurately measure small amounts of materials.





HCRAI



**CAUTION
CORROSIVES**



(SE-CUR-ALL CABINETS)
NFPA STANDARDS OSHA REGULATIONS
SAFETY STORAGE CABINET
FOR FLAMMABLE / CORROSIVE LIQUIDS
A & S SHEET METAL PRODUCTS, INC.
Manufacturers of Safety Cabinets and Tanks
LAFAYETTE, INDIANA 46001

ALODINE

ALODINE STORAGE

ALODINE STORAGE

TWO TYPES NORMALLY FOUND IN FLEET:

1. **ALODINE 1201 (8030-00-823-8039)
MSDS# BQCTG**
2. **TOUCH-N-PREP COATING, ALODINE
1132 (8030-01-460-0246) MSDS# -
CBXRF**

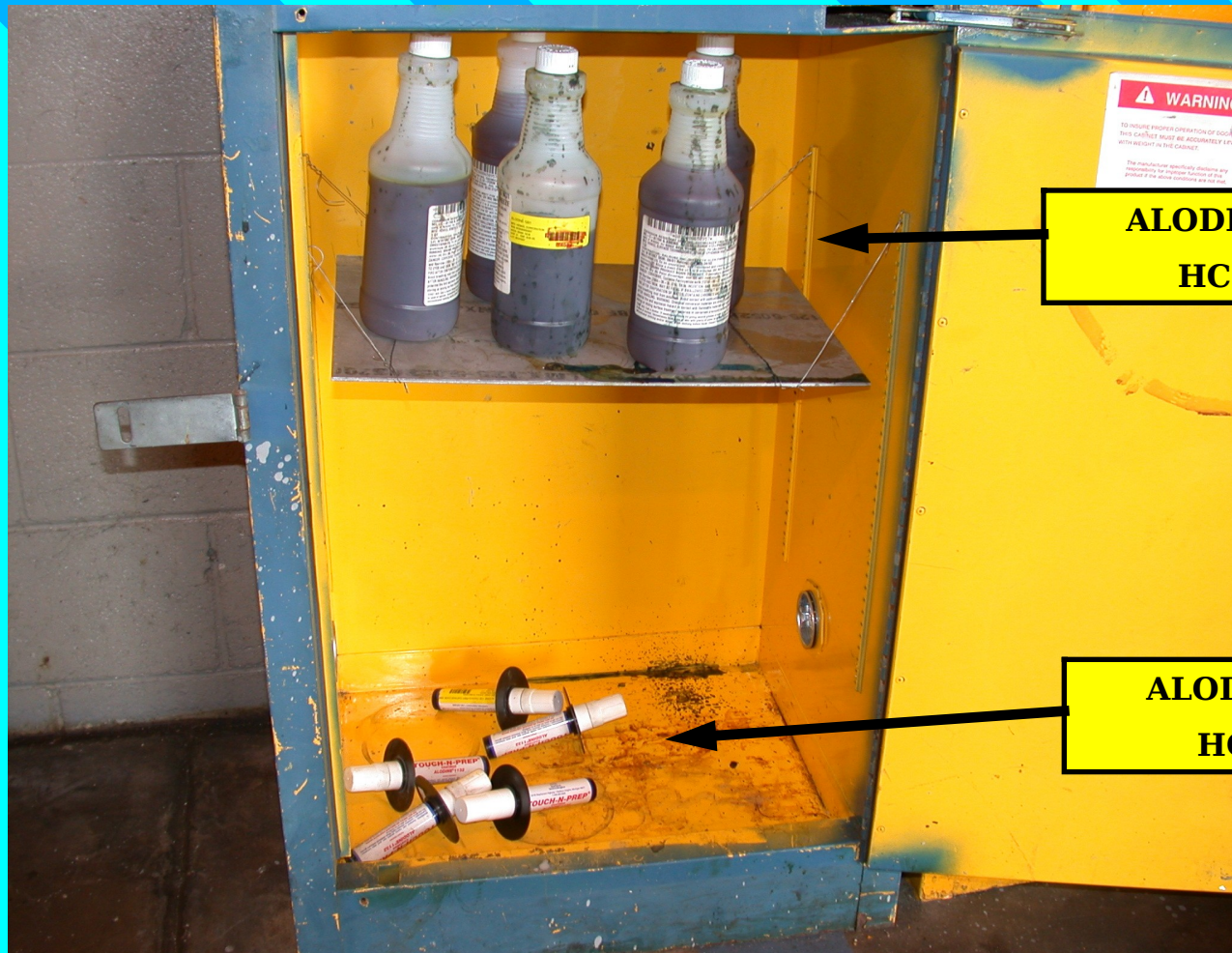
ALODINE STORAGE

(continued)

- Alodine 1201 has recently been reclassified from an OXIDIZER (HCC - D3) to a CORROSIVE (HCC - C1)
- Alodine 1132 has been classified as an OXIDIZER (HCC - D3) .
- THIS NOW MAKES THE TWO CHEMICALS.

INCOMPATIBLE

ARE YOU STORING YOUR ALODINE CORRECTLY?



**ALODINE 1201
HCC - C1**

**ALODINE 1132
HCC - D3**

WHAT NOT TO DO WHEN WORKING WITH HAZMAT/HAZWASTE!

REMEMBER, WE'LL MAKE
YOU FAMOUS!











SUMMARY

- **KNOW YOUR REFERENCES AND INSTRUCTIONS!**
- **TRAINING. TRAIN EVERYBODY, SUPERVISORS, WORKERS, EVERYONE!**
- **IF YOU DON'T KNOW...ASK! BASE ENVIRONMENTAL OR SAFETY, COMNAVAIRLANT OR PAC, NAVAL SAFETY CENTER.**
- **LASTLY. K.I.S.S. (Keep It Simple Sailor)**



AVIATION MAINTENANCE SAFETY CONFERENCE

2005

HAZARDOUS MATERIAL CONTROL & MANAGEMENT PROGRAM

QUESTIONS ?

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